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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,079	10/31/2003	Ziyun Wang	ATMI-594-CIP	1841
25559 7590 03 <i>i</i> ATMI, INC.			EXAMINER	
7 COMMERCE			BARTS, SAMUEL A	
DANBURY, CT 06810			ART UNIT	PAPER NUMBER
			1621	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE .	DELIVER	Y MODE
3 MONTHS		03/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-		Application No.	Applicant(s)				
		10/699,079	WANG ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Samuel A. Barts	1621 ·				
Pariod f	The MAILING DATE of this communication apport Reply	pears on the cover sheet with the c	orrespondence address				
		· · · · · · · · · · · · · · · · · · ·	0) 00 THEFT (00) DAYO				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailin ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from b, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠	Posponsive to communication(s) filed on 04 /	anuan, 2007					
2a)⊠							
3)□	•—		secution as to the merits is				
ا (۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	·	in parto quayro, 1000 0.2. 11, 10					
Disposit	ion of Claims						
4)⊠	Claim(s) 1-31 is/are pending in the application	•					
	4a) Of the above claim(s) 14-17 and 24-31 is/are withdrawn from consideration.						
5)⊠)⊠ Claim(s) <u>13</u> is/are allowed.						
6)⊠	☑ Claim(s) <u>1-12 and 18-23</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	or election requirement.					
Applicat	ion Papers	•	·				
9)□	The specification is objected to by the Examine	er.					
. 10)□	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the I	Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	ected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.				
Priority (under 35 U.S.C. § 119						
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
•	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority document	ts have been received.					
	2. Certified copies of the priority document	ts have been received in Applicati	on No				
	3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage				
	application from the International Burea	u (PCT Rule 17.2(a)).					
* (See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachmer	it(s)						
1) 🔯 Notic	ce of References Cited (PTO-892)	4) Interview Summary					
	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal F 6) Other:	atent Application				
		-/ <u>-</u>					

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DETAILED ACTION

Response to Arguments

1. Applicant's amendment filed 1/4/2007 with respect to 1-12 is sufficient to obviate the previous office action rejection. The rejection of claims over Yang et al and Kito are hereby withdrawn.

Please note that the withdrawal of claims 18-20 was inadvertently withdrawn from consideration. It is clear that they claims should have been included in the rejection of the previous office action because the claims did read on the compounds disclosed in Yang et al and Kito.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-12,18,20,21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wan et al (*Synthesis of (dialkylamino)disilanes*: Inorganic Chemistry (1993), 32(3), 341-4).

Wan et al discloses the following compound in benzene¹.

¹ See page 342, the compound named Hexakis(diethylamino)disilane.

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$$(Et)_{2}N \qquad N(Et)_{2}$$

$$\downarrow \qquad \qquad \downarrow$$

$$(Et)_{2}N \longrightarrow Si \longrightarrow Si \longrightarrow N(Et)_{2}$$

$$\downarrow \qquad \qquad \downarrow$$

$$(Et)_{2}N \qquad N(Et)_{2}$$

The compound is fully embraced by the instant claims. This compound meets all the limitations of the claims. Some limitations are drawn to inherent properties. For example claims 5, 6 11, and 12 are drawn to properties of the compounds. These limitations are inherent properties of the compound taught in Wan et al.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim18-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan et al.

Wan et al substantially disclosed the claimed invention. See 102(b) rejection stated herein. The instant claims differ by reciting the solvent HNiPr2. Wan et al used benzene when making the compound

$$(Et)_{2}N \longrightarrow N(Et)_{2}$$

$$(Et)_{2}N \longrightarrow Si \longrightarrow Si \longrightarrow N(Et)_{2}$$

$$(Et)_{2}N \longrightarrow N(Et)_{2}$$

$$(Et)_{2}N \longrightarrow N(Et)_{2}$$

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It would have been obvious to one having ordinary skill in the art at that time that applicant's invention was made to have used other solvents in the recovery of Hexakis(diethylamino)disilane with a reasonable expectation of success. One skilled in the art would have been motivated to use other solvents depending on such factors as availability and cost.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Barts whose telephone number is 571-272-2870. The examiner can normally be reached on 6:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samuel A Barts
Primary Examiner
Art Unit 1621